GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA

STARRED QUESTION NO:421
ANSWERED ON:10.04.2003
NCE PROJECTS
NANDIPAKU VENKATASWAMY;T.T.V. DHINAKARAN

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the details of non-conventional energy projects commissioned during each of the last two years and for the current financial year, State-wise;

(b) the share of wind, solar and tidal power in the total power generated through non-conventional energy;

(c) the target fixed for production of power during the Tenth Plan;

(d) whether any incentives are being given to private power producers for setting up of non-conventional energy projects in the country;

(e) if so, the details thereof; and

(f) the total amount sanctioned and spent under the scheme during each of the last three years?

Answer

MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN)

(a), (b), (c), (d), (e) & (f) : A Statement is laid on the Table of the House.

Statement referred to in reply to parts (a), (b), (c), (d), (e) & (f) of Lok Sabha Starred Question No. 421 for answer on 10.4.2003 regarding NCE Projects.

(a) : The details of major non-conventional energy projects for power generation from wind, small hydro, solar, biomass and urban & industrial waste commissioned during the last two years, i.e., 2001-02 and 2002-03, State-wise, are given in Annexure-I. A target of 470.75 MW capacity addition from these sources has been fixed for the current financial year, i.e., 2003-04.

(b) : A total capacity addition of 3935 MW through non-conventional energy sources has been achieved as on 31.03.2003, which includes 1860 MW from wind power and 2.50 MW from solar power. There is no contribution from tidal power since the latter technology is yet to be demonstrated commercially in India.

(c) : A target of 3100 MW capacity addition through various non-conventional energy sources has been fixed for the 10th Plan period.

(d)&(e) : The Ministry is providing financial incentives for the installation of power plants based on non-conventional energy sources like solar, biomass and small hydro. The details of financial incentives provided under these programmes are given in Annexure-II. Fiscal incentives, viz., depreciation, relief from taxes and duties and soft term loans are provided to attract private sector participation in this area. Besides, policies relating to wheeling, banking, buy-back and third party sale of power have been introduced in 15 States to encourage private investment in power generation through non-conventional energy sources.

(f): An amount of Rs. 71.97 crores , Rs. 102.66 crores and Rs. 89.01 crores has been provided for 2000-01, 2001-02 and 2002-03 respectively for generation of power through non-conventional energy sources.

Details of non-conventional energy projects commissioned during 2001-02 and 2002-03

Sl.No.	State/UT	Wind Power		Solar Photovoltaic		Small Hydro		Biomass Gasifier		Biomass Power		Energy from Wastes	
		2001-02	2002-03	2001-02	2002-03	2001-02	2002-03	2001-02	2002-03	2001-02	2002-03	2001-02	2002-03
		(MW)		(kWp)		(MW)		(MW)		(kW)		(MW)	
1	Andhra Pr	0.70	~	100.00	~	11.90	4.90	47.50	58.85	100.00	~	4.25	~
2	Arunanchal Pr	~	~	~	~	~	~	~	~	~	~	~	~
3	Assam	~	~	~	~	~	~	~	~	~	~	~	~
4	Bihar	~	~	~	~	~	~	~	~	~	~	~	~

5 Goa ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
6 Gujarat ~ 5.00 ~ ~ ~ ~ ~ ~ 7070.00 ~ 0.45 ~
7 Haryana ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
8 Himachal Pr ~ ~ ~ ~ 3.56 1.40 ~ ~ ~ ~ ~ ~
9 Jammu & Kashmir ~ ~ ~ ~ 8.11 9.00 ~ ~ ~ ~ ~ ~
10 Karnataka 24.00 46.50 ~ ~ 14.55 25.02 12.00 33.78 500.00 ~ ~ ~
11 Kerala ~ ~ ~ ~ ~ ~ ~ ~ 100.00 5 ~ ~
12 Madhya Pradesh ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
13 Maharashtra 209.40 2.00 ~ ~ 2.00 3.00 15.50 ~ ~ ~ 0.90 ~
14 Manipur ~ ~ ~ ~ ~ 0.75 ~ ~ ~ ~ ~ ~
15 Meghalaya ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
16 Mizoram ~ ~ ~ ~ ~ ~ ~ ~ ~ 200 ~ ~
17 Nagaland ~ ~ ~ ~ 16.00 0.60 ~ ~ ~ ~ ~ ~
18 Orissa ~ ~ ~ ~ ~ 6.00 ~ ~ ~ ~ ~ ~
19 Punjab ~ ~ ~ 200.00 1.00 4.20 ~ 10.00 ~ ~ ~ ~
20 Rajasthan 8.80 45.60 50.00 ~ ~ ~ ~ ~ ~ ~ ~ ~
21 Sikkim ~ ~ ~ ~ ~ 3.00 ~ ~ ~ ~ ~ ~
22 Tamil Nadu 44.90 132.70 ~ ~ 2.10 2.50 8.00 ~ ~ 100 0.20 1.75
23 Tripura ~ ~ ~ ~ ~ ~ ~ ~ 1000.00 ~ ~ ~
24 Uttar Pradesh ~ ~ ~ ~ 6.00 ~ ~ ~ 660.00 1015 ~ 2.00
25 West Bengal 0.60 ~ 25.00 ~ ~ 3.00 ~ ~ 1685.00 250 ~ ~
26 A & Nicobar ~ ~ ~ 50 ~ ~ ~ ~ ~ ~ ~ ~
27 Chandigarh ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
28 D & N Haveli ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
29 Daman & Diu ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
30 Delhi ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
31 Lakshwadeep ~ ~ 200.00 250 ~ ~ ~ ~ ~ ~ ~ ~
32 Pondicherry ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
33 Chattisgarh ~ ~ ~ ~ ~ 0.80 6.00 ~ ~ 500 ~ ~
34 Jharkhand ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
35 Uttranchal ~ ~ ~ ~ ~ 6.45 ~ ~ ~ ~ ~ ~
36 Common for ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
all States

Total 288.40 231.80 375.00 500 65.22 70.62 89.00 102.63 11115.00 2070.00 5.80 3.75

MW = Mega Watt;
kWp = Kilo Watt peak;
kW = Kilo Watt

Annexure-II

Annexure-II referred to in reply to parts (d) & (e) of Lok Sabha Starred Question No. 421 for 10.4.2003 regarding NCE Projects

Details of financial incentives provided under various non-conventional energy programmes

S. No. Name of Programme Details of subsidies

1. Biomass Gasifier 60% for general States
90% for North East Region and Sikkim and Special Category States.

2. Small Hydro Programme

Capital subsidy

Upto 500 kW 90% cost upto Rs.0.75 lakh per kW for NE States

Equipment cost +50% of civil cost upto Rs.45,000 per kW

for middle Himalaya, Ladakh and A&N and Rs.30,000/kW for other areas (only notified hilly regions)

Above 500 kw to 1 MW 90% cost upto Rs.0.60 lakh per kW for NE States

Equipment cost +50% of civil cost upto Rs.45,000 per kW for middle Himalaya, Ladakh and A&N and Rs.30,000 per kW for other areas (only notified hilly regions)

Above 1 MW to 5 MW 75% cost upto Rs.4.50 crores per MW for NE States

Equipment cost +25% of civil cost upto Rs.3 crores per MW for middle Himalaya, Ladakh and A&N and Rs.1.50 crores per MW for other areas (only notified hilly regions)

Above 5 MW to 15 MW Equipment cost +25% of civil cost upto Rs.22.50 crores per project for NE States

Equipment cost +25% of civil cost upto Rs.15 crores per project for middle Himalaya, Ladakh and A&N and Rs.7.5 crores per MW for other areas (only notified hilly regions)

Interest subsidy 2% to 7.5%
(Floor rate applicable = 7.5%)

3 Wind Power

i) Land based demonstration project Upto 60% of equipment cost.

ii) Wind Diesel Hybrid Projects Full cost of the equipment subject to benchmark of Rs.70 lakh per kW. In addition, 90% for laying new or existing lines for electrification in remote and difficult areas.

4 SPV Power (grid connected) Maximum upto Rs.2 crores /100 kWp

5 Biomass Power/Cogeneration

Interest subsidy 3% - 5%
(Floor rate applicable = 8%)

a. Bagasse Congeneration

Projects by Cooperative/Public/ joint Sector Sugar Mills 60 bar and above (40 to 80 bars and above) 2% - 3% (Floor rate applicable = 8%)

Projects in IPP mode in cooperative/ public sector sugar mills (60 to 80 bar and above) 2% - 3% (Floor rate applicable = 10%)

Projects by private sugarmills (60 to 80 bar and above)	2% - 3% (Floor rate applicable = 8%)
b. Biomass Cogeneration	
Commercial projects (60 to 80 bars and above)	Additional interest subsidy @ 2%. (Floor rate applicable = 8%)
c. Biomass Power	
For NE States	
Commercial projects (60 to 80 bars and above)	2% - 3% (Interest Subsidy) (Floor rate applicable = 10%)
MW-scale projects with 100% producer gas engines	Capital subsidy of Rs.1 crore per MW
Advanced Biomass Gasification	Capital subsidy of Rs.1 crore per MW
6 Power from urban & Industrial Wastes	
Capital subsidy	Upto 50% of capital cost, subject to maximum of Rs.3 crores per MW for innovative demonstration projects
Interest subsidy	Interest subsidy for reducing the rate of interest to 7.5% subject to Rs.0.50 crores to Rs.2.00 crores per MW depending upon type of projects and category of waste for commercial projects (Floor rate applicable = 7.5%)

MW = Mega Watt.
kWp = Kilo Watt peak.
kW = Kilo Watt.
PV = Photovoltaic.